

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

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USDC

AKAMAI TECHNOLOGIES, INC.,
and
MASSACHUSETTS INSTITUTE OF
TECHNOLOGY,

Plaintiffs,

v.

DIGITAL ISLAND, INC.
and
KINETECH, INC.

Defendants.

Civil Action No. 00-cv-11851RWZ

Judge Rya W. Zobel

JURY TRIAL REQUESTED

DIGITAL ISLAND, INC.,
and
KINETECH, INC.

Counterclaimants,

v.

AKAMAI TECHNOLOGIES, INC.,
Counterdefendant.

Civil Action No. 01-cv-11007RWZ

Declaration of F. Thomson Leighton

I, F. Thomson Leighton, hereby declare and state as follows:

1. My name is Tom Leighton. I am a Director and the Chief Scientist of Akamai Technologies, Inc. ("Akamai"). I know of the following from my own personal knowledge, and if called and sworn as a witness, could and would competently testify thereto.

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2. I understand Digital Island has filed a motion for summary judgment of non-infringement of the '030 patent. This Declaration is filed in opposition to that motion.

3. On November 27, 2001, I requested that Akamai personnel run a set of discovery tests to discover the location of Digital Island equipment in the Internet. I have attached a true and correct copy of the test results. Based on the discovery tests, Akamai has located at least two hundred fifty (250) deployments of Digital Island equipment throughout the Internet. A significant percentage of these deployments are in Client Networks whose primary business is providing connectivity to the Internet for end users. An example of such a Client Network is RoadRunner, which is a local Internet service provider in the Northeast.

4. I understand that traffic measurements are conducted from these deployments to generate data, and that Digital Island then uses that data to route end users to optimal Digital Island content servers. Because these traffic tests are conducted from Client Networks, such measurements constitute network traffic tests from the client side of the network.

5. In support of its motion, Digital Island argues that its does not perform traffic measurements from the client side of the network because, to the extent those measurements are being performed from equipment that also serves content, such equipment must be considered to be on the "server side" of the network. This is incorrect for the reasons set forth below.

6. Even if content is served from a piece of hardware, if that hardware is physically located on the client side of the network and also performs a network traffic test, then Digital Island is performing traffic tests from the client side of the network.

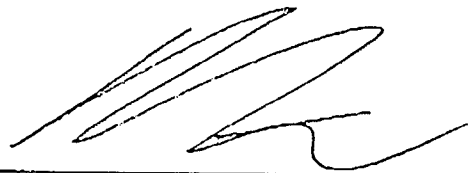
7. Akamai's tests reveal that substantial portions of the content distributed by Digital Island is not distributed from all deployments. For example, all of Digital Island's streaming content is only served from approximately thirty (30) deployments, which are primarily centrally

located in the Internet. Thus, traffic tests are believed to be performed from over two hundred deployments from which streaming content is not being delivered. Whatever equipment Digital Island uses to carry out those traffic tests (even if that equipment is also used for serving non-streaming content) is operating on the client side (and not the server side) of the Digital Island streaming network.

8. In particular, when an end user requests streaming content from the Digital Island content delivery network, he or she presumably is routed to an optimal streaming server. Because the streaming servers are deployed in a centralized manner, and because some of the non-streaming servers are deployed in Client Networks that are located between end users and the streaming servers, at least some of the traffic measurements conducted by non-streaming servers are necessarily "client" side with respect to the streaming server deployment.

9. Moreover, the non-streaming servers that are deployed in Client Networks act as proxies for the performance of end users with respect to the Digital Island streaming network. Therefore, traffic tests from these non-streaming servers are client side network traffic tests for the Digital Island streaming network.

I declare under penalty of perjury that the foregoing is both true and correct. Executed on this 28th day of November, 2001.



F. Thomson Leighton

Non-Streaming Deployments for DI

IP	AS	Name
38.200.111.131	174	PSINet
208.45.129.195	209	Qwest
216.206.179.4	209	Qwest
63.237.52.162	209	Qwest
62.132.142.99	517	University of Karlsruhe
198.30.3.3	600	OARnet
216.202.136.237	701	UUNET
63.125.210.227	701	UUNET
63.125.211.67	701	UUNET
63.125.211.99	701	UUNET
203.102.129.100	703	UUNET
193.64.205.66	790	
209.167.238.227	814	
209.115.243.35	852	
206.61.145.131	1239	Sprint
206.61.145.195	1239	Sprint
206.61.145.3	1239	Sprint
206.61.145.67	1239	Sprint
208.23.76.6	1239	Sprint
208.24.118.3	1239	Sprint
63.162.230.3	1239	Sprint
63.162.230.35	1239	Sprint
63.162.230.67	1239	Sprint
63.162.230.99	1239	Sprint
63.174.72.230	1239	Sprint
194.219.87.35	1241	
193.14.90.197	1257	
213.69.164.99	1270	
194.90.224.35	1680	
195.158.253.163	1755	Ebone Consortium
195.158.253.98	1755	Ebone Consortium
213.174.86.2	1755	Ebone Consortium
213.174.86.34	1755	Ebone Consortium
146.228.203.227	1836	
193.154.172.65	1901	KPNQwest Austria
152.163.210.67	2056	
152.163.215.37	2056	
193.95.148.101	2110	
148.122.172.3	2119	
202.238.95.194	2527	
207.87.91.35	2548	
204.184.17.16	2572	
210.8.213.34	2764	
207.88.54.33	2828	
217.32.247.131	2856	
217.32.247.67	2856	
157.238.202.93	2914	Verio
157.238.44.131	2914	Verio
161.58.178.209	2914	Verio
199.237.96.5	2914	Verio
209.189.13.226	2914	Verio
209.39.59.163	2914	Verio
216.139.159.3	2914	Verio
216.44.45.3	2914	Verio
193.207.47.99	3228	
212.157.128.114	3259	
194.192.81.226	3292	
209.247.108.227	3356	
63.208.106.67	3356	
63.208.138.35	3356	
63.208.96.131	3356	
63.209.122.67	3356	
63.209.152.195	3356	

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63.209.69.194 3356
63.210.100.163 3356
63.210.132.195 3356
63.210.241.3 3356
63.210.62.163 3356
63.211.20.227 3356
63.211.217.3 3356
63.211.227.195 3356
63.214.191.195 3356
64.152.2.35 3356
64.152.81.67 3356
211.20.185.2 3462
208.48.218.67 3549
208.48.218.68 3549
208.48.218.69 3549
208.48.218.70 3549
208.48.218.71 3549
208.48.218.72 3549
208.48.218.73 3549
206.24.176.140 3561
206.25.8.67 3561
199.181.166.164 3575
199.181.166.66 3575
196.23.129.99 3741
63.249.2.227 3742
165.21.86.83 3758
209.99.10.12 3900
63.150.163.39 3908
209.185.216.136 3967
216.35.138.28 3967
211.155.225.131 4134
200.183.26.108 4230
200.244.182.17 4230
200.244.182.86 4230
200.244.83.4 4230
209.92.185.179 4231
206.151.167.230 4281
208.59.215.99 4530
156.46.150.35 4550
216.145.208.158 4550
203.150.29.202 4618
203.120.73.55 4628
202.67.197.227 4645
210.55.6.227 4648
210.118.237.67 4670
203.139.60.194 4682
211.11.159.131 4713
211.11.159.67 4713
203.149.9.39 4741
203.146.50.3 4750
203.230.212.109 4766
203.97.78.132 4768
210.12.127.3 4799
210.15.3.195 4799
209.85.10.5 5097
195.92.74.35 5388
195.11.246.34 5417
194.78.225.35 5432
212.169.188.34 5549
63.141.36.121 5696
64.78.164.99 5705
209.173.142.131 6076
216.151.111.13 6104

Pacific Internet/Singapore

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200.60.69.218 6147
 209.125.11.131 6172
 209.219.187.98 6172
 64.232.139.99 6172
 206.129.184.227 6347
 216.89.17.163 6347
 216.91.187.195 6347
 207.235.111.163 6361
 208.63.66.117 6382
 206.82.142.3 6453
 209.240.197.83 6469
 207.230.26.3 6496
 148.245.54.11 6503
 165.193.100.6 6553
 167.216.141.145 6553
 167.216.142.116 6553
 167.216.142.244 6553
 167.216.148.129 6553
 167.216.150.116 6553
 167.216.196.97 6553
 167.216.210.49 6553
 167.216.216.116 6553
 167.216.216.52 6553
 167.216.217.116 6553
 167.216.217.52 6553
 167.216.218.180 6553
 167.216.218.244 6553
 167.216.218.52 6553
 167.216.253.53 6553
 216.80.78.98 6555
 195.68.121.15 6675
 213.41.120.35 6675
 195.141.102.49 6730
 195.141.86.81 6730
 217.157.131.119 6785
 195.13.68.163 6847
 24.128.10.12 7015 ServiceCo LLC - Road Runner
 24.30.1.9 7016
 12.39.91.242 7018
 12.43.50.163 7018
 216.15.133.35 7393 Cybercon
 216.218.1.106 7445
 210.23.100.195 7491
 211.36.242.163 7620
 203.97.230.163 7714
 209.83.184.130 7737
 200.216.240.15 7738
 209.240.77.195 7753
 24.130.30.91 7757 ServiceCo LLC - Road Runner
 64.39.161.99 7794
 208.62.218.194 8061
 24.219.160.131 8092
 148.233.141.181 8151
 148.235.64.197 8151
 195.128.95.99 8470
 213.5.17.99 8509
 194.27.140.43 8517
 195.54.111.69 8642
 213.237.16.221 8807
 213.239.31.131 8918
 213.239.31.163 8918
 213.239.31.195 8918
 213.239.31.227 8918

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212.187.253.67	9057	
194.129.64.162	9194	
211.110.5.227	9277	
210.14.0.163	9299	
203.83.119.66	9513	
202.79.124.37	9740	
202.156.3.197	10091	
216.17.5.243	10242	
206.26.160.131	10588	
205.188.132.67	10593	
205.188.134.3	10593	
205.243.85.35	10608	
216.106.135.221	10608	
65.32.4.161	10994	
216.117.43.195	11264	Internet Direct Communications
64.224.18.81	11305	
24.24.1.67	11351	
200.186.158.3	11415	
24.27.1.57	11427	ServiceCo LLC - Road Runner
198.5.146.194	11486	
198.5.146.202	11486	
204.178.119.194	11486	
204.178.98.99	11486	
208.245.164.252	11550	BlueMarble Information Services
64.29.65.67	11563	
63.98.12.153	11653	
24.94.162.66	11955	
24.168.136.81	12271	ServiceCo LLC - Road Runner
212.110.163.163	12565	
195.246.136.129	12642	
213.145.21.133	12909	
62.58.41.195	13127	
64.156.31.227	13680	
200.32.120.73	13835	
200.41.60.163	13835	
200.52.170.210	13999	Mega Cable Mexico
200.52.173.210	13999	Mega Cable Mexico
200.52.193.210	13999	Mega Cable Mexico
162.33.166.195	14390	
216.235.98.97	14534	
64.80.155.195	15270	
216.219.75.3	15872	
64.15.129.227	15878	
63.104.225.163	16852	
64.160.118.71	17018	
216.82.99.104	17054	
132.235.194.32	17135	
202.169.46.3	17451	
63.104.231.5	18511	
63.121.98.69	18805	
64.210.192.67	18994	
63.121.106.133	19265	
217.206.96.196	20136	
141.150.149.226	n/a	
192.168.10.3	n/a	
209.181.82.198	n/a	
216.47.225.180	n/a	

DI Streaming Deployments

IP	AS	Name	di_streaming_ips
216.206.178.252	209	Qwest	
212.177.57.40	702	UUNET	
212.209.75.24	702	UUNET	
213.174.86.162	1755	Ebone Consortium/STUPI	
148.122.172.35	2119	TELENOR	
202.238.95.226	2527	JNIC	
207.88.54.105	2828	Concentric	
212.155.204.87	3259	UUNET-FR	
63.137.0.35	3561	Cable & wireless USA	
200.251.191.10	4230	EMBRATEL-BR	
216.246.84.71	5097	SoftAware	
195.92.10.5	5388	POL-AS/UK Internet Service Provider	
195.92.74.3	5388	POL-AS/UK Internet Service Provider	
62.210.134.162	5594	Cable & wireless France	
64.56.69.35	5705	Verado	
64.78.210.5	5705	Verado	
165.193.99.70	6553	Digital Island	
167.216.132.218	6553	Digital Island	
167.216.132.219	6553	Digital Island	
207.189.78.251	6553	Digital Island	
207.189.78.253	6553	Digital Island	
207.189.87.198	6553	Digital Island	
207.189.91.185	6553	Digital Island	
207.189.95.198	6553	Digital Island	
212.162.58.163	9057	Level 3 Europe	
212.187.178.227	9057	Level 3 Europe	
212.73.235.67	9057	Level 3 Europe	
213.244.179.3	9057	Level 3 Europe	
202.79.124.5	9740	Cable & wireless Singapore	
205.188.160.165	10593	America Online	
193.109.49.243	12755	COLT Internet Switzerland	